

**Commonwealth of Kentucky**  
**Division for Air Quality**

**PERMIT APPLICATION SUMMARY FORM**

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General Information

Name:	Olin Chemicals and Chlor Alkali, Inc., Doe Run Plant
Address:	2450 Olin Road, P.O. Box 547, Brandenburg, KY 40108-0547
Date application received:	12-11-96
SIC/Source description:	2869/Organic Chemicals Manufacturing
AFS(10-digit) Plant ID:	21-163-0001
EIS #:	104-2700-0001
Finds #:	KYD006396246
Application log number:	E849
Permit number:	V-97-051

Application Type/Permit Activity

<input type="checkbox"/> Initial issuance	<input type="checkbox"/> General permit
<input type="checkbox"/> Permit modification	<input type="checkbox"/> Conditional major
___Administrative	<input checked="" type="checkbox"/> Title V
___Minor	<input type="checkbox"/> Synthetic minor
___Significant	<input type="checkbox"/> Operating
<input type="checkbox"/> Permit renewal	<input type="checkbox"/> Construction/operating

Compliance Summary

<input type="checkbox"/> Source is out of compliance	<input checked="" type="checkbox"/> Compliance schedule included
<input checked="" type="checkbox"/> Compliance certification signed	

Applicable Requirements list

<input checked="" type="checkbox"/> NSR	<input checked="" type="checkbox"/> NSPS	<input type="checkbox"/> SIP
<input type="checkbox"/> PSD	<input checked="" type="checkbox"/> NESHAPS	<input type="checkbox"/> Other

Miscellaneous

☐ Acid rain source  
☒ Source subject to 112(r)  
☒ Source applied for federally enforceable emissions cap  
☐ Source provided terms for alternative operating scenarios  
☒ Source subject to a MACT standard  
☐ Source requested case-by-case 112(g) or (j) determination  
☐ Application proposes new control technology  
☒ Certified by responsible official  
☒ Diagrams or drawings included  
☒ Confidential business information (CBI) submitted in application  
☐ Pollution Prevention Measures  
☐ Area is non-attainment (list pollutants):

## Emissions Summary

<b>Pollutant</b>	<b>Actual (tpy)</b>	<b>Potential (tpy)</b>
PM	50.79	50.79
SO <sub>2</sub>	6.56	6.56
NO <sub>x</sub>	4674.83	4674.83
CO	593.80	593.80
VOC	994.58	994.58
LEAD	NA	NA
HAP $\geq$ 10 tpy (by CAS):		
75-21-8 / Ethylene Oxide	305.77	305.77
75-56-9 / Propylene Oxide	152.34	152.34
75-45-6 / R22	167.58	167.58
107 -13-1 / Acrylonitrile	15.56	15.56
1330-20-7 / Xylene	15.58	15.58

### Source Process Description:

Olin Chemicals Corporation is a synthetic organic chemical manufacturing industry (SOCMI) falling under SIC Code Group 28. The primary operation at the Doe Run plant consists of the manufacturing of glycols, polyols, resins, urethane systems, flexible foams, adducts, and surfactants. The primary raw materials at the plant are ethylene and propylene oxides. The oxides are reacted with other compounds to produce the products listed. Chemical production is grouped into several areas: Light Hydrocarbon (LHC), Polychemicals, Poly Solv®, Propylene Glycol, Ethylene/Propylene Oxides, Polymer Polyol, ADI/TDI Adducts, 2A1 Surfactants), Microelectronics, Urethane Systems, and Flexible Foam.

The plant also includes several support activities such as Utilities, Pilot Plant, Waste Water Treatment, Storage Facilities, and Quality Control/Assurance Laboratories.

### Emission and Operating Caps description:

- a. Emission and Operating Caps:  
Please refer to the respective Production Areas listed on the permit for any emissions or operating limits.
- b. Early Reductions Emission Cap: NA
- c. Synthetic Minors:  
Please refer to the permit for emissions units for which Olin has received synthetic minor permits

### Operational Flexibility:

NA